# High School to College and Career Pathway: Secondary Area of Study: Information Technology Education

Pathway: Information Support & Services Database Development & Administration



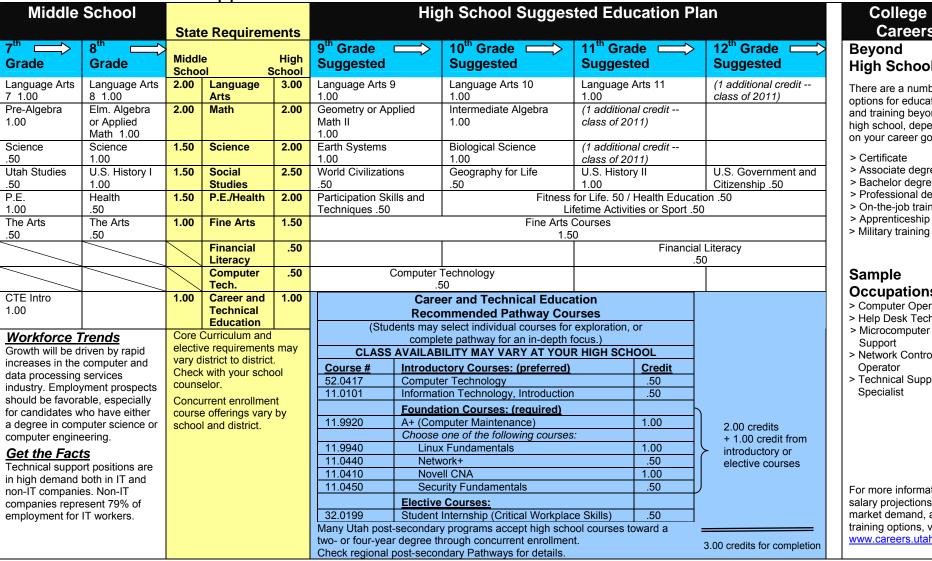
Dalabase Developmen					it & Aummistra	•					
Middle School		State Requirements			Hiç	College & Careers					
7 <sup>th</sup> Crade	8 <sup>th</sup> Crade	Middl Scho	ol S	High School	9 <sup>th</sup> Grade Suggested	10 <sup>th</sup> Grade $\Longrightarrow$ Suggested	11 <sup>th</sup> Grade ——> Suggested	Suggested	Beyond High School		
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts	3.00	Language Arts 9 1.00	Language Arts 10 1.00	Language Arts 11 1.00	(1 additional credit class of 2011)	There are a number of options for education		
Pre-Algebra 1.00	Elm. Algebra or Applied Math 1.00	2.00	Math	2.00	Geometry or Applied Math II 1.00	Intermediate Algebra 1.00	(1 additional credit class of 2011)		and training beyond high school, depending on your career goals.  > Certificate		
Science .50	Science 1.00	1.50	Science	2.00	Earth Systems 1.00	Biological Science 1.00	(1 additional credit class of 2011)				
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies	2.50	World Civilizations .50	Geography for Life .50	U.S. History II 1.00	U.S. Government and Citizenship .50	<ul><li>Associate degree</li><li>Bachelor degree</li></ul>		
P.E. 1.00	Health .50	1.50	P.E./Health	2.0	Participation Skills and Techniques .50	Li	for Life. 50 / Health Educ fetime Activities or Sport.	> Professional degree > On-the-job training			
The Arts .50	The Arts .50	1.00	Fine Arts	1.50		Fine Arts 1.5		> Apprenticeship > Military training			
			Financial Literacy	.50			Financial Literacy .50				
			Computer Tech.	.50		Technology 50			Sample Occupations		
CTE Intro 1.00		1.00	Career and Technical Education	1.00	Reco	Career and Technical Education Recommended Pathway Courses (Students may select individual courses for exploration, or					
Workforce Tomputer syste		Core Curriculum and elective requirements may				ete pathway for an in-depth t		> Database Architect > Database Design Analyst			
computer scient	database administrators, and computer scientists are expected to be among the		listrict to distric with your schoolselor.		Course #     Introductory Courses: (preferred)     Credit       52.0417     Computer Technology     .50       11.0101     Information Technology, Introduction     .50				> Database Developer > Database Engineer > Information Scientist		
	fastest growing occupations through the year 2012.		urrent enrollme e offerings vary		Founda	tion Courses: (required)		2.00 credits	- mornation odientist		
	Get the Facts Information Technology workers		l and district.		11.0301   Database Development I   1.00   Choose one of the following courses:			+ 1.00 credit from			
are needed in nearly every industry. The demand for						nputer Programming I abase Development II	1.00 1.00	introductory or elective courses			
technically skilled workers is growing in almost every					Elective Courses:  11.0202 Computer Programming II 1.00				For more information on salary projections, labor		
industry, not just in those considered high-tech.					32.0199 Student Internship (Critical Workplace Skills) .50  Many Utah post-secondary programs accept high school courses toward a				market demand, and training options, visit		
Sonsidered High-teeri.					two- or four-year degree through concurrent enrollment.  Check regional post-secondary Pathways for details.  3.00 credits for completion				www.careers.utah.gov		
									001101		

## High School to College and Career Pathway: Secondary

Area of Study: Information Technology Education

Pathway: Information Support & Services







#### College & **Careers**

## **High School**

There are a number of options for education and training beyond high school, depending on your career goals.

- > Associate degree
- > Bachelor degree
- > Professional degree
- > On-the-job training

#### Sample **Occupations**

- > Computer Operator
- > Help Desk Technician
- > Microcomputer Support
- > Network Control
- > Technical Support Specialist

For more information on salary projections, labor market demand, and training options, visit www.careers.utah.gov

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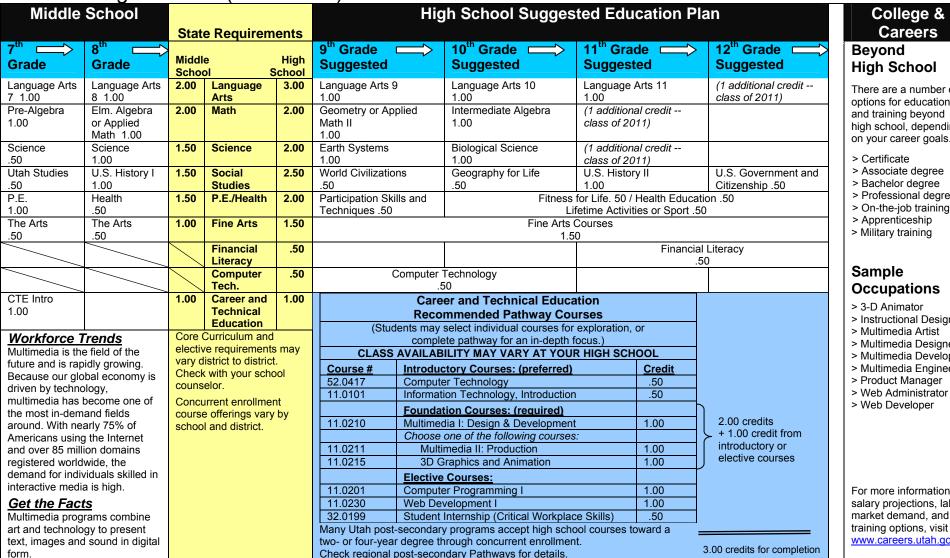
**Note:** For more information talk to your school counselor.

## High School to College and Career Pathway: Secondary

Area of Study: Information Technology Education

Pathway: Interactive Media

Digital Media (Multimedia)



College & **Careers** 

## **High School**

There are a number of options for education and training beyond high school, depending on your career goals.

- > Associate degree
- > Bachelor degree
- > Professional degree
- > On-the-job training

## **Occupations**

- > Instructional Designer
- > Multimedia Artist
- > Multimedia Designer
- > Multimedia Developer
- > Multimedia Engineer
- > Product Manager
- > Web Developer

For more information on salary projections. labor market demand, and training options, visit www.careers.utah.gov

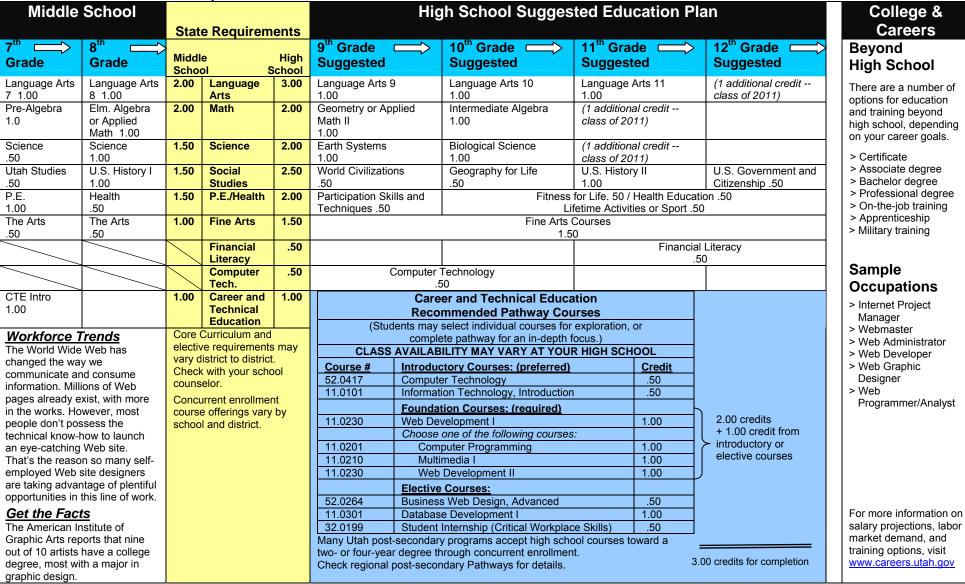
## High School to College and Career Pathway: Secondary

Area of Study: Information Technology Education

## Pathway: Interactive Media

Note: For more information talk to your school counselor.

Web Development & Administration



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Pathway: Network Systems



Middle School		State Requirements			High School Suggested Education Plan					College & Careers	
7 <sup>th</sup> $\Longrightarrow$ Grade	8 <sup>th</sup> Crade			9 <sup>th</sup> Grade		10 <sup>th</sup> Grade Suggested	11 <sup>th</sup> Grad Suggeste		12 <sup>th</sup> Grade >	Beyond High School	
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts	3.00	Language Arts 9 1.00		Language Arts 10 1.00	Language Arts 11 1.00		(1 additional credit class of 2011)	There are a number of options for education
Pre-Algebra 1.00	Elm. Algebra or Applied Math 1.00	2.00	Math	2.00	Geometry or Applied Math II 1.00		Intermediate Algebra 1.00	(1 additiona class of 201	11)		and training beyond high school, depending on your career goals.
Science .50	Science 1.00	1.50	Science	2.00	Earth Systems 1.00		Biological Science 1.00	(1 additional credit class of 2011)			> Certificate
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies	2.50	World Civilizations		Geography for Life .50	U.S. History 1.00		U.S. Government and Citizenship .50	<ul><li>Associate degree</li><li>Bachelor degree</li></ul>
P.E. 1.00	Health .50	1.50	P.E./Health	2.00	Participation S Techniques .50		Fitness for Life. 50 / Health Educ Lifetime Activities or Sport				> Professional degree > On-the-job training
The Arts .50	The Arts .50	1.00	Fine Arts	1.50			Fine Arts Courses 1.50				> Apprenticeship > Military training
			Financial Literacy	.50					Financi	al Literacy .50	
			Computer Tech.	.50			Technology 50				Sample Occupations
CTE Intro 1.00  Workforce Trends Growth will be driven by rapid increases in the computer and data processing services industry.  Get the Facts The term "computer bug" was coined in the 1940s, when an insect got into a relay in a primitive electromechanical computer, causing computer malfunctions.		Tech.  1.00 Career and Technical Education  Core Curriculum and elective requirements may vary district to district. Check with your school counselor.  Concurrent enrollment course offerings vary by school and district.			CLAS: Course # 52.0417 11.0101  11.0410 11.0420  11.0430 11.0440  11.9920 11.9940 11.0450 32.0199 Many Utah pos	Reco  Idents may comple S AVAILAB  Introduct Compute Informat Founda Choose Certi Cisco (CCN Micro Netw A+ (Con Linux FL Security Student St-secondar	ter and Technical Education and Technology (Technology) and Technology (Techno	r exploration, of focus.)  R HIGH SCHO  n  og courses: NA)  trator  (MCP)  ce Skills)  ool courses to	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.50 credits + 1.50 credit from introductory or elective courses  3.00 credits for completion	Occupations  > LAN Administrator  > Network Analyst  > Network Engineer  > Telecommunication Manager  For more information on salary projections, labor market demand, and training options, visit www.careers.utah.gov
						ndary Pathways for details.				001103	

# High School to College and Career Pathway: Secondary Area of Study: Information Technology Education

Pathway: Programming/Software Development

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Middle	State Requirements			Hi	College & Careers				
7 <sup>th</sup> Crade	8 <sup>th</sup> Crade	Middle High School School		9 <sup>th</sup> Grade >>> Suggested	10 <sup>th</sup> Grade >	11 <sup>th</sup> Grade ——> Suggested	> 12 <sup>th</sup> Grade	Beyond High School	
Language Arts 7 1.00 Pre-Algebra 1.00 Science .50 Utah Studies .50 P.E. 1.00 The Arts .50	Language Arts 8 1.00 Elm. Algebra or Applied Math 1.00 Science 1.00 U.S. History I 1.00 Health .50 The Arts	2.00 2.00 1.50 1.50 1.50	Language Arts Math  Science  Social Studies P.E./Health  Fine Arts  Financial Literacy	2.00 2.00 2.50 2.50 2.50 1.50	Language Arts 9 1.00 Geometry or Applied Math II 1.00 Earth Systems 1.00 World Civilizations .50 Participation Skills and Techniques .50	There are a number of options for education and training beyond high school, depending on your career goals.  > Certificate > Associate degree > Bachelor degree > Professional degree > On-the-job training > Apprenticeship > Military training			
			Computer Tech.	.50	•	Technology 50			Sample Occupations
Demand for prochelp organization changing technologing technological continue. Prospete best for college knowledge of various programming lait tools; those with education or wo should face keep	Technical Education  Forkforce Trends  Formand for programmers to only porganizations keep up with anging technology will ntinue. Prospects should be set for college graduates with owledge of various pogramming languages and pols; those with less formal ucation or work experience ould face keen competition.  Technical Education  Core Curriculum and elective requirements may vary district to district.  Check with your school counselor.  Concurrent enrollment course offerings vary by school and district.				Career and Technical Education Recommended Pathway Courses  (Students may select individual courses for exploration, or complete pathway for an in-depth focus.)  CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL  Course # Introductory Courses: (preferred)			2.00 credits + 1.00 credit from introductory or elective courses	> Computer Programmer > Computer Systems A Analyst > Game Programmer > Software Engineer
Programmers represent the largest size group of IT workers. A total of 22,000 average annual job openings are expected for computer programmers through the year 2010.					11.0230 Web De 32.0199 Studen Many Utah post-seconda two- or four-year degree	edia I: Design & Developmen evelopment II t Internship (Critical Workpla- ry programs accept high sch chrough concurrent enrollmen endary Pathways for details.	1.00 ce Skills) .50 ool courses toward a	3.00 credits for completion	For more information on salary projections, labor market demand, and training options, visit www.careers.utah.gov

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Note: For more information talk to your school counselor.